

nose-leaf; and, at a short distance behind the nose-leaf, this naked membrane is slightly elevated, and forms a transverse fleshy tubercle.

	In.	Lines.		In.	Lines.
Length of head and body . . .	3	3	Length of tarsus (claw included) . . .	0	8½
interfemoral membrane . . .	0	3½	ear . . . . .	0	4
the antibrachium . . . . .	2	2	tragus . . . . .	0	3
thumb (claw included) . . . . .	0	8	nose-leaf . . . . .	0	2½
tibia . . . . .	0	10	Expanse of the wings . . . . .	12	8

Habitat, Coquimbo, Chile. (*May.*)

"The Vampire Bat," says Mr. Darwin in his MS. notes upon the present species, "is often the cause of much trouble, by biting the horses on their withers. The injury is generally not so much owing to the loss of blood, as to the inflammation which the pressure of the saddle afterwards produces. The whole circumstance has lately been doubted in England; I was therefore fortunate in being present when one was actually caught on a horse's back. We were bivouacking late one evening near Coquimbo, in Chile, when my servant, noticing that one of the horses was very restive, went to see what was the matter, and fancying he could distinguish something, suddenly put his hand on the beast's withers, and secured the Vampire. In the morning, the spot where the bite had been inflicted was easily distinguished from being slightly swollen and bloody. The third day afterwards we rode the horse, without any ill effects.

Before the introduction of the domesticated quadrupeds, this Vampire Bat probably preyed on the guanaco, or vicugna, for these, together with the puma, and man, were the only terrestrial mammalia of large size, which formerly inhabited the northern part of Chile. This species must be unknown, or very uncommon in Central Chile, since Molina, who lived in that part, says (*Compendio de la Historia del Reyno de Chile*, vol. i. p. 301,) "that no blood-sucking species is found in this province."

It is interesting to find that the structure of this animal is in perfect accordance with the habits as above detailed by Mr. Darwin. Among other points, the total absence of true molars, and consequent want of the power of masticating food, is the most remarkable. On the other hand we find the canines and incisors perfectly fitted for inflicting a wound such as described, while the small size of the interfemoral membrane (giving freedom to the motions of the legs,) together with the unusually large size of the thumb and claw, would enable this Bat, as I should imagine, to fix itself with great security to the body of the horse.

I have named this species after M. d'Orbigny, who has added so much to

our information on the zoological productions of South America. The *Edostoma cinerea*\* of that author has evidently a close affinity to the animal here described, and differs chiefly (judging from the drawing published in his work) in the larger size of the ears, in having the nose-leaf free, and the surrounding membrane free and elevated.

As M. d'Orbigny has not yet published the character of his genus *Edostoma*, his figure is my only guide, and in this figure I find the dentition agreeing both with that of the present species, and that of the genus *Desmodus* of Prince Maximilian,—as would appear from the published descriptions, and figure given by M. de Blainville†.—The points of distinction between M. d'Orbigny's animal and the species here described, are not, in my opinion, of sufficient importance to constitute generic characters, I have, therefore, retained the name of *Desmodus*.

It is desirable perhaps to separate the Blood-sucking Bats from the Insectivorous species, and place them between the latter group and the *Pteropina*, (with which they agree in the large size of the thumb and the rudimentary interfemoral membrane,) under a sectional name, which I propose to call *Hæmatophilini*.

# 1. PHYLLOSTOMA GRAYI.

## PLATE II.

*P. fusco-cinereum*; *nasus prosthernate lanceolato*; *auribus mediocribus, trago basin versus extus unidentato*; *cauda gracillima, brevi, et membranâ interfemorali inclusa*; *verruca complanata ad apicem menti, verrucis parvulis circumdata*.

DESCRIPTION.—This *Phyllostoma* agrees with the species described by Mr. J. Gray‡ under the name of *Childreni*, in having on the lower lip "an half ovate group of crowded warts," but is of a much smaller size, and differs also in colour.

The number of teeth are as follows:—incisors 4; canines 2; molars  $\frac{5-5}{5-5}=32$ . The intermediate pair of incisors of the upper jaw are large, compressed, and have their apices rounded; the lateral pair are so minute, that they are scarcely visible without the assistance of a lens: the four incisors of the

\* *Voy. Amer. Merid.* t. 8.

† See his memoir "Sur quelques anomalies du système dentaire dans les mammifères," published in the *Annales Françaises et Etrangères d'Anatomie et de Physiologie*, No. 6, pl. IX. fig. 2.

‡ *Magazine of Zoology and Botany*, No. 12.